

REMARKS

Claims 1-37 and 40 are pending in the Application, of which method claims 1, 5, 16, 22, 25 and 40, and device claims 17 and 18, are the independent claims.

All claims stand rejected as obvious over the combination of Izatt with Faris.

Applicants' undersigned representative is appreciative of the telephone interview of April 20, 2009 with Examiner Lamprecht, and, in furtherance thereof, Applicants present the foregoing amendments to more clearly indicate the intended scope of patent coverage.

In particular, Applicants clarify that the reference that gives rise to the second electromagnetic wave is a non-linear medium, and as such, exhibits a response that depends upon the field intensity of the first electromagnetic wave, and, moreover, responds by scattering radiation at a wavelength that differs from that of the first (pump) wave. The use of such a scatter wave as the reference wave in an OCT configuration distinguishes the embodiments of the present claims over any teaching or suggestion of Izatt or Faris, each taken alone, or taken in combination.

Applicants note, for the record, that the "reference" to which Izatt refers is a metrological reference laser beam, unrelated to the sample under observation, that serves merely to measure the position of the his mirror. Izatt does not use, or teach, a non-linear medium serving to provide a reference beam.

Applicants therefore respectfully request allowance of all the pending claims.

If the Examiner has any outstanding questions, he is invited to call Applicants' undersigned representative at 617-443-9292.

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Respectfully submitted,

/Samuel J. Petuchowski #37,910/

Samuel J. Petuchowski
Registration No. 37,910
Attorney for Applicant

Bromberg & Sunstein LLP
125 Summer Street
Boston, MA 02110-1618
(617) 443-9292

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